

Transmissible Spongiform Encephalopathies

Animals	-	BSE	-	cattle
	-	Scrapie	-	sheep & goats
	-	CWD	-	deer & elk
	-	TME	-	mink
	-	zoo ruminants		
	-	feline		
People	-	CJD		
	-	nvCJD		
	-	Kuru		

Transmissible Spongiform Encephalopathies

- **Poorly understood cause(s)**
- **Long incubation period**
- **Short clinical duration**
- **Death**

Cause of TSEs

(current theories)

- **Prion**
- **Virus**
- **Bacteria**

Bovine Spongiform Encephalopathy (BSE)

Major Events

- 1986** - First diagnosis of BSE in UK
 - Since then more than 165,000 cattle have died from BSE. These originated in about 33,000 herds - most dairy, some beef herds.
- 1989** - Since 1989 no cattle or cattle derived products from BSE countries have been imported into the US.
- 1992** - FDA issued an Import Bulletin to detain animal by-products from BSE countries.
- 1992** - Letters sent to manufacturers of dietary supplements.
- 1993** - Asked manufacturers to reformulate products to assure they do not contain ingredients from BSE animals.
- 1994** - Use no bovine materials from BSE countries.
- 1996** - Advised manufacturers of the possible relationship between BSE in cattle and vCJD.
- 1997** - To date USDA has examined more than 5,100 brains from animals showing CNS symptoms and found no evidence of BSE.

BSE

No BSE has been found in the U.S.

Potential Sources of BSE to U.S.

- Scrapie or other TSE**
- Spontaneous Mutation**
- Transborder Introduction**

January 3 - Proposed Rule to Prohibit Certain Rendered Animal Protein in Ruminant Feed

- **Rendered animal protein from ruminants and mink is not recognized as safe for use in ruminant feed.**
- **FDA proposed a flexible system of controls to ensure that ruminant feed does not contain rendered protein from ruminants and mink.**

Alternatives

- **Mammalian to ruminant prohibition**
- **Ruminant and mink to ruminant prohibition**
- **Partial ruminant to ruminant prohibition**
- **Prohibition to ruminants of all rendered materials from species which have been diagnosed with TSEs (sheep, goats, mink, deer, and elk)**
- **Adult sheep and goat to ruminant prohibition**
- **No action**
- **Other actions which would meet the regulatory objective**

Internet Address for the CVM Homepage

www.cvm.fda.gov/

Proposed Rule

- **1/3/97 - Ruminant to Ruminant**
- **Economic Assessment**
- **Environmental Assessment**

Open Public Meeting

***Docket* 96N-0135**